

108TH CONGRESS }
1st Session

SENATE

{ REPORT
108-181

TECHNOLOGY ADMINISTRATION
REAUTHORIZATION

R E P O R T

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND
TRANSPORTATION

ON

S. 1395



OCTOBER 30, 2003.—Ordered to be printed

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SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

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TECHNOLOGY ADMINISTRATION REAUTHORIZATION

OCTOBER 30, 2003.—Ordered to be printed

Mr. MCCAIN, from the Committee on Commerce, Science, and
Transportation, submitted the following

R E P O R T

[To accompany S. 1395]

The Committee on Commerce, Science, and Transportation, to which was referred the bill (S. 1395) to authorize appropriations for the Technology Administration of the Department of Commerce for fiscal years 2004 through 2008, having considered the same, reports favorably thereon with amendments and recommends that the bill (as amended) do pass.

PURPOSE OF THE BILL

The purpose of the bill, as amended, is to authorize the Technology Administration of the U.S. Department of Commerce for Fiscal Year (FY) 2004 through FY 2008.

BACKGROUND AND NEEDS

The U.S. Department of Commerce's Technology Administration (TA) is chartered to provide advice on technology policy, support technology development, and disseminate technology information.

The TA is comprised of the Office of Technology Policy (OTP), the Office of Space Commercialization (OSC), the National Institute of Standards and Technology (NIST), and the National Technical Information Service (NTIS).

The Office of the Under Secretary for Technology is responsible for providing broad policy guidance to the Secretary of Commerce and the TA's component agencies, and serving as an advocate for innovation and industrial competitiveness within and outside of the Federal government. The Under Secretary serves on the Executive

Committee of the Committee on Technology within the President's National Science and Technology Council, coordinates the civilian technology efforts of Federal agencies, and helps to shape Federal civilian R&D priorities based upon the needs of industry. The Under Secretary also is counsel to the Secretary of Commerce on all matters affecting innovation and coordinates with counterparts in the trade and economic agencies to create unified, integrated technology policies.

The Under Secretary for Technology oversees the TA and utilizes the analytical, outreach, and policy development expertise of the Office of Technology Policy and the Office of Space Commercialization. The Office of Technology Policy is charged with conducting analysis, formulating policy, and advocating national policies to maximize technology's contribution to United States competitiveness and economic growth. The Office of Space Commercialization was created in statute by the Technology Administration Act of 1998 (P.L. 105-309) and serves as the principal unit for the coordination of space-related issues, programs, and initiatives within the Department of Commerce.

The National Institute of Standards and Technology (NIST) works with United States industries to address technology needs, delivering results shared among companies, industries, and consumers. In addition to its core functions to develop and promote measurements, standards, and technology to enhance productivity and facilitate trade, NIST also conducts three extramural programs: the Advanced Technology Program, to stimulate the development of high risk, potentially high pay-off civilian technologies by United States firms; the Manufacturing Extension Partnership, to help smaller businesses adopt new manufacturing and management technologies; and the Malcolm Baldrige National Quality Program, to help United States industries improve the quality of their operations by providing clear standards and benchmarks of quality.

The National Technical Information Service (NTIS) collects and disseminates scientific, technical, engineering, and related business information, serving more than 60,000 customers annually.

The President's FY 2004 budget request for the TA is as follows: the Office of the Under Secretary/Office of Technology Policy—\$8.0 million; NIST—\$496.8 million; and the NTIS—\$0 (NTIS is required by statute to be self-sufficient).

LEGISLATIVE HISTORY

S. 1395 was introduced on July 11, 2003, by Senators McCain and Brownback, and was referred to the Committee on Commerce, Science, and Transportation (the Committee). A hearing on the Technology Administration and its programs was held during the 107th Congress, on April 16, 2002.

On July 17, 2003, the Committee met in open executive session and, by a voice vote, ordered S. 1395 reported with two amendments. An amendment offered by Senators McCain and Hollings increases funding for the Construction and Maintenance activities at NIST. Another amendment, offered by Senator Hollings, adds funding for the Advanced Technology Program at NIST.

ESTIMATED COSTS

In accordance with paragraph 11(a) of rule XXVI of the Standing Rules of the Senate and section 403 of the Congressional Budget Act of 1974, the Committee provides the following cost estimate, prepared by the Congressional Budget Office:

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, August 27, 2003.

Hon. JOHN MCCAIN,
*Chairman, Committee on Commerce, Science, and Transportation,
U.S. Senate, Washington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 1395, the Technology Administration Authorization Act of 2003.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Melissa Zimmerman.

Sincerely,

DOUGLAS HOLTZ-EAKIN,
Director.

Enclosure.

S. 1395—Technology Administration Authorization Act of 2003

Summary: S. 1395 would authorize the appropriation of specific amounts for fiscal years 2004 through 2008 for various technology programs administered by the Department of Commerce (DOC). Specifically, the bill would authorize appropriations for the National Institute of Standards and Technology (NIST), the office of the Under Secretary for Technology, and the Office of Technology Policy.

Assuming appropriation of the authorized amounts, CBO estimates that implementing S. 1395 would cost about \$3.6 billion over the 2004–2008 period. CBO estimates that enacting this bill would have no effect on direct spending or revenues.

S. 1395 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA). The bill would benefit state, local, and tribal governments.

Estimated cost to the Federal government: The estimated budgetary impact of S. 1395 is shown in the following table. The costs of this legislation fall within budget function 370 (commerce and housing credit). For this estimate, CBO assumes that amounts authorized will be appropriated near the beginning of each fiscal year and that outlays will follow historical spending patterns for the affected programs.

	By fiscal year, in millions of dollars—					
	2003	2004	2005	2006	2007	2008
SPENDING SUBJECT TO APPROPRIATION						
Spending for DOC Technology Programs Under Current Law:						
Budget Authority	718	0	0	0	0	0
Estimated Outlays	699	370	144	56	20	7
Proposed Changes:						
Authorization Level	0	825	907	884	993	990
Estimated Outlays	0	370	628	787	891	964

	By fiscal year, in millions of dollars—					
	2003	2004	2005	2006	2007	2008
Spending for DOC Technology Programs Under S. 1395:						
Authorization Level	718	825	907	884	993	990
Estimated Outlays	699	740	772	843	911	971

¹ The 2003 level is the amount appropriated for that year.

Intergovernmental and private sector impact: S. 1395 contains no intergovernmental or private-sector mandates as defined in UMRA. The bill would benefit state, local, and tribal governments by authorizing a total of \$4 million for a Teacher Science and Technology Enhancement Institute at the National Institute for Standards and Technology that would provide teachers, many from public schools, with training in science and technology.

Estimate prepared by: Federal costs: Melissa E. Zimmerman; impact on state, local, and tribal governments: Sara Puro; impact on the private sector: Paige Paper/Bach.

Estimate approved by: Peter H. Fontaine, Deputy Assistant Director for Budget Analysis.

REGULATORY IMPACT STATEMENT

In accordance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee provides the following evaluation of the regulatory impact of the legislation, as reported:

NUMBER OF PERSONS COVERED

S. 1395, as reported, would reauthorize appropriations for the TA for fiscal years 2004, 2005, 2006, 2007 and 2008. TA and its sub-agencies conduct measurements and standards activities in support of United States industries and manages technology grant and assistance programs to increase United States competitiveness. The Committee believes that the bill will not subject any individuals or businesses affected by the bill to any additional regulation.

ECONOMIC IMPACT

This legislation would not have an adverse impact on the Nation. This authorization would allow NIST to continue its support of United States industries by conducting its standards and measurements setting functions. NIST grants and programs would continue to assist United States businesses in being more competitive in international markets and would continue to benefit the general public through contributing to the economic growth of the country from investments in new science and technology ventures that otherwise would not be undertaken.

PRIVACY

This legislation would not have a negative impact on the personal privacy of individuals.

PAPERWORK

This legislation would not increase the paperwork requirement for private individuals or businesses. The bill would require the Secretary of Commerce to report, within 90 days after the date of enactment, to the Senate Committee on Commerce, Science, and

Transportation and the House of Representatives Committee on Science, on the financial status of the NTIS. This legislation also would require NIST to submit a Facilities and Construction plan within 6 months after enactment to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science.

SCIENCE-BY-SECTION ANALYSIS

Section 1. Short title

This section would cite the title as the “Technology Administration Authorization Act of 2003”.

Section 2. Definitions

This section would define key terms in the Act, including “Director” and “Secretary”.

Section 3. Authorization of appropriations for scientific and technical research and services

Subsection (a) would authorize the following amounts for the Scientific and Technical Research and Services laboratory activities of NIST: \$387,621,000 for FY 2004, of which \$5,795,000 shall be for the National Quality Program; \$410,878,000 for FY 2005, of which \$5,969,000 shall be for the National Quality Program; \$435,530,000 for FY 2006, of which \$6,148,000 shall be for the National Quality Program; \$461,662,000 for FY 2007, of which \$6,332,000 shall be for the National Quality Program; and \$489,362,000 for FY 2008, of which \$6,522,000 shall be for the National Quality Program.

Subsection (b) would authorize the following amounts for construction and maintenance of facilities at NIST: \$81,000,000 for FY 2004; \$129,000,000 for FY 2005; \$71,000,000 for FY 2006; \$142,000,000 for FY 2007; and \$100,000,000 for FY 2008. This subsection also would require NIST to submit a Facilities and Construction plan within 6 months after enactment to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science.

Subsection (c) would authorize the following amounts for the Teacher Science and Technology Enhancement Institute Program at NIST: \$750,000 for FY 2004; \$773,000 for FY 2005; \$796,000 for FY 2006; \$820,000 for FY 2007; and \$844,000 for FY 2008.

Subsection (d) would authorize the following amounts for the Manufacturing Extension Partnership Program at NIST: \$107,000,000 for FY 2004; \$110,210,000 for FY 2005; \$113,516,000 for FY 2006; \$116,921,000 for FY 2007; and \$120,429,000 for FY 2008.

Subsection (e) would authorize the following amounts for the Advanced Technology Program at NIST: \$240,000,000 for FY 2004; \$247,200,000 for FY 2005; \$254,616,000 for FY 2006; \$262,254,000 for FY 2007; and \$270,122,000 for FY 2008.

Section 4. Authorizations for the Office of the Undersecretary for Technology

Subsection (a) would authorize the following funds for the Office of the Under Secretary for Technology and the Office of Technology

Policy: \$8,015,000 for FY 2004; \$8,255,000 for FY 2005; \$8,503,000 for FY 2006; \$8,758,000 for FY 2007; and \$9,021,000 for FY 2008.

Subsection (b) would authorize the following funds for the Office of Space Commercialization: \$500,000 for FY 2004; \$515,000 for FY 2005; \$530,000 for FY 2006; \$546,000 for FY 2007; and \$563,000 for FY 2008.

Section 5. Amendment to the Stevenson-Wydler Act

This section would amend the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3711a(c)) to allow nonprofit organizations that primarily provide services to qualify for the Malcolm Baldrige National Quality Award and would strike the two award limit applicable to any subcategory within any one-year period.

Section 6. Financial Status of the National Technical Information Service

This section would require the Secretary of Commerce to report, within 90 days after the date of enactment, to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science, on the financial status of the National Technical Information Service.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new material is printed in italic, existing law in which no change is proposed is shown in roman):

STEVENSON-WYDLER TECHNOLOGY INNOVATION ACT OF
1980

SEC. 17. MALCOLM BALDRIGE NATIONAL QUALITY AWARD.

[15 U.S.C. 3711A]

(a) **ESTABLISHMENT.**—There is hereby established the Malcolm Baldrige National Quality Award, which shall be evidenced by a medal bearing the inscriptions “Malcolm Baldrige National Quality Award” and “The Quest for Excellence.” The medal shall be of such design and materials and bear such additional inscriptions as the Secretary may prescribe.

(b) **MAKING AND PRESENTATION OF AWARD.**—

(1) The President (on the basis of recommendations received from the Secretary), or the Secretary, shall periodically make the award to companies and other organizations which in the judgment of the President or the Secretary have substantially benefitted the economic or social well-being of the United States through improvements in the quality of their goods or services resulting from the effective practice of quality management, and which as a consequence are deserving of special recognition.

(2) The presentation of the award shall be made by the President or the Secretary with such ceremonies as the President or the Secretary may deem proper.

(3) An organization to which an award is made under this section, and which agrees to help other American organizations improve their quality management, may publicize its receipt of such award and use the award in its advertising, but it shall be ineligible to receive another such award in the same category for a period of 5 years.

(c) CATEGORIES IN WHICH AWARD MAY BE GIVEN.—

(1) Subject to paragraph (2), separate awards shall be made to qualifying organizations in each of the following categories—

(A) Small businesses.

(B) Companies or their subsidiaries.

(C) Companies and nonprofit organizations which primarily provide services.

(D) Health care providers.

(E) Education providers.

(2) The Secretary may at any time expand, subdivide, or otherwise modify the list of categories within which awards may be made as initially in effect under paragraph (1), and may establish separate awards for other organizations including units of government, upon a determination that the objectives of this section would be better served thereby; except that any such expansion, subdivision, modification, or establishment shall not be effective unless and until the Secretary has submitted a detailed description thereof to the Congress and period of 30 days has elapsed since that submission.

[(3) Not more than two awards may be made within any subcategory in any year, unless the Secretary determines that a third award is merited and can be given at no additional cost to the Federal Government (and no award shall be made within any category or subcategory if there are no qualifying enterprises in that category or subcategory).]

(d) CRITERIA FOR QUALIFICATION.—

(1) An organization may qualify for an award under this section only if it—

(A) applies to the Director of the National Institute of Standards and Technology in writing, for the award.

(B) permits a rigorous evaluation of the way in which its business and other operations have contributed to improvements in the quality of goods and services, and

(C) meets such requirements and specifications as the Secretary, after receiving recommendations from the Board of Overseers established under paragraph (2)(B) and the Director of the National Institute of Standards and Technology determines to be appropriate to achieve the objectives of this section. In applying the provisions of subparagraph (C) with respect to any organization, the Director of the National Institute of Standards and Technology shall rely upon an intensive evaluation by a competent board of examiners which shall review the evidence submitted by the organization and, through a site visit, verify the accuracy of the quality improvements claimed. The examination should encompass all aspects of the organization's current practice of quality management, as well as the organization's provision for quality management in its future goals. The award shall be given only to organizations

which have made outstanding improvements in the quality of their goods or services (or both) and which demonstrate effective quality management through the training and involvement of all levels of personnel in quality improvement.

(2)(A) The Director of the National Institute of Standards and Technology shall, under appropriate contractual arrangements, carry out the Director's responsibilities under subparagraphs (A) and (B) of paragraph (1) through one or more broad-based nonprofit entities which are leaders in the field of quality management and which have a history of service to society.

(B) The Secretary shall appoint a board of overseers for the award, consisting of at least five persons selected for their preeminence in the field of quality management. This board shall meet annually to review the work of the contractor or contractors and make such suggestions for the improvement of the award process as they deem necessary. The board shall report the results of the award activities to the Director of the National Institute of Standards and Technology each year, along with its recommendations for improvement of the process.

(e) INFORMATION AND TECHNOLOGY TRANSFER PROGRAM.—The Director of the National Institute of Standards and Technology shall ensure that all program participants receive the complete results of their audits as well as detailed explanations of all suggestions for improvements. The Director shall also provide information about the awards and the successful quality improvement strategies and programs of the award-winning participants to all participants and other appropriate groups.

(f) FUNDING.—The Secretary is authorized to seek and accept gifts from public and private sources to carry out the program under this section. If additional sums are needed to cover the full cost of the program, the Secretary shall impose fees upon the organizations applying for the award in amounts sufficient to provide such additional sums. The Director is authorized to use appropriated funds to carry out responsibilities under this Act.

(g) REPORT.—The Secretary shall prepare and submit to the President and the Congress, within 3 years after the date of the enactment of this section, a report on the progress, findings, and conclusions of activities conducted pursuant to this section along with recommendations for possible modifications thereof.